

Title (en)

PREVIOUS LAYER SELF-ALIGNED VIA AND PLUG PATTERNING FOR BACK END OF LINE (BEOL) INTERCONNECTS

Title (de)

SUBTRAKTIVE SELBSTJUSTIERENDE DURCHFÜHRUNG UND STECKERSTRUKTURIERUNG FÜR BEOL-VERBINDUNGEN

Title (fr)

AGENCEMENT DE TRAVERSÉES ET DE BOUCHONS AUTO-ALIGNÉS SUR LA COUCHE PRÉCÉDENTE POUR INTERCONNEXIONS DE FABRICATION FINALE (BEOL)

Publication

EP 3050086 A1 20160803 (EN)

Application

EP 13894291 A 20130927

Priority

US 2013062327 W 20130927

Abstract (en)

[origin: WO2015047321A1] Previous layer self-aligned via and plug patterning for back end of line (BEOL) interconnects are described. In an example, an interconnect structure for an integrated circuit includes a first layer disposed above a substrate. The first layer of the interconnect structure includes a grating of alternating metal lines and dielectric lines in a first direction. A second layer of the interconnect structure is disposed above the first layer. The second layer includes a grating of alternating metal lines and dielectric lines in a second direction, perpendicular to the first direction. Each metal line of the grating of the second layer is disposed on a recessed dielectric line composed of alternating distinct regions of a first dielectric material and a second dielectric material corresponding to the alternating metal lines and dielectric lines of the first layer of the interconnect structure.

IPC 8 full level

H01L 21/768 (2006.01); **H01L 23/528** (2006.01)

CPC (source: EP KR US)

H01L 21/76801 (2013.01 - EP US); **H01L 21/76802** (2013.01 - US); **H01L 21/76807** (2013.01 - EP KR US); **H01L 21/76816** (2013.01 - EP KR US); **H01L 21/76829** (2013.01 - US); **H01L 21/76835** (2013.01 - KR); **H01L 21/76838** (2013.01 - KR); **H01L 21/7685** (2013.01 - KR); **H01L 21/76883** (2013.01 - US); **H01L 21/76897** (2013.01 - EP KR US); **H01L 23/5226** (2013.01 - US); **H01L 23/528** (2013.01 - EP KR US); **H01L 23/5329** (2013.01 - US); **H01L 2924/0002** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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